

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

BABICH et al.

Title:

TECHNETIUM-AND

RHENIUM-BIS (HETEROARYL)

COMPLEXES, AND METHODS

OF USE THEREOF

Appl. No.:

10/589206

International

2/14/2005

Filing Date:

371(c) Date:

8/11/2006

Examiner:

Not yet available

Art Unit:

Not yet available

Confirmation

Not yet available

Number:

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

CERTIFICATE OF EXPRESS MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

EV 961803221 US

February 7, 2007

(Express Mail Label Number)

(Date of Deposit)

Carolyn Anderson

(Printed Name

TRANSMITTAL LETTER

Transmitted herewith for filing in the above-referenced patent application are the following documents:

- ✓ Information Disclosure Statement Under 37 CFR § 1.56 (3 pgs.);
- ✓ Form 1449 Information Disclosure Citation (2 pgs.);
- ✓ References (24 documents); and
- ✓ Return Receipt Postcard.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-3431.

Date: February 7, 2007

Respectfully submitted,

James F. Ewing, Reg. No. 52,875

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INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.56

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO-1449 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

All of the documents are in English.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

BOST_228983.1

Although Applicant believes that no fee is required for this Request, the Commissioner is hereby authorized to charge any additional fees which may be required for this Request to Deposit Account No. 50-3431.

By

Respectfully submitted,

Date _____

FER 0 7 2007

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James F. Ewing

Attorney for Applicant Registration No. 52,875

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EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATI		
	A1	20030235843	12/25/2003	Babich et al.	435	6	3/11/2003		
	A2	20020061599	5/23/2002	Elling et al.	436	518	12/29/2000		
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	, -	OTHER DOCU	MENIS (Including)	Author, Title, Date, Po	ertinent Pages, 	Etc.)			
	C1	Abufarag et al : "7i	nc Compleyes of the l	_igand Dipicolylglycine'	" Inorganic Cher	mietn, 3/18). 1	2207.2216	: /100	
		Abdiatag ct al., 2	no complexes of the t	Ligaria Dipicolyigiyerile	, morganic onei	1813ti y 54(6). 2	2201-2210	, (199	
	C2	Alberto et al.; "Application of Technetium and Rhenium Carbonyl Chemistry to Nuclear Medicine. Preparation of [Net 4] 2 [TcC ₁₃ (CO) ₃] From [NBU4][TcO ₄] and Structure of [NEt 4][Tc ₂ (μ-Cl) ₃ (CO) ₆]; Structures of the Model Complexes [Net ₄][Re ₂ (μ-OEt) ₂ (μ-OAc)(CO) ₆]and [ReBr({-CH ₂ S(CH ₂) ₂ Cl} ₂) (CO) ₃]", Transition Met. Chem. 22: 597-601, (1997)							
	C3	Alberto et al.; "A Novel Organometallic Aqua Complex of Technetium for the Labeling of Biomolecules: Synthesis of [99m Tc (OH ₂) ₃ (CO) ₃] ⁺ from [99m TcO ₄] ⁻ Aqueous Solution and Its Reaction with a Bifunction Ligand", J. Am. Chem. Soc. 120: 7987-7988, (1998)							
Banerjee et al.; "{Re ^{III} Cl ₃ } Core Complexes with Bifunctional Single Amino Acid Chelates", Inorganic Chemistry 41(22): 5795-5802, (2002) Banerjee et al.; "Bifunctional Single Amino Acid and Chelates for Labeling of Biomolecules with and {Re(CO) ³ } ⁺ Cores", Inorganic Chemistry 41(24): 6417-6425, (2002)							organic Ch	nemisti	
							ith the {To	(CO)3	
	Cox et al.; "Catecholate LMCT Bands as Probes for the Active Sites of Nonheme Iron Oxygenases", J. A Chem. Soc. 110: 2026-2032, (1988)							Am.	
	C7		New class of Oxotect y 20(6): 1629-1632, (nnetium (5+) Chelate C June 1981)	omplexes contai	ning a TcON ₂	S ₂ Core",		
	C8	1		n-99m-Labeled Recept nents and Encouraging	•		& Biology :	24: 48	
				,,,,,,,					
	C9	_		on of Neutral Lipid-solul edicine 25: 326-332, (1		lexes that Cro	ss the Blo	ood-	

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Form PTO-144 (MODIFIED)	49	U.S. DEPARTMENT OF COMMERCE	ATTY. DOCKET NO.	SERIAL NO.				
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	 	OTHER DOCUMENTS (Including A						
ADEMARK OF THE			· · · · · · · · · · · · · · · · · · ·					
	C11	Kung et al.; "New Tc-99 Complexes Base (Abstract No. 719), (June 1986)	ed on N ₂ S ₂ Ligands", The Journal of	Nuclear Medicine 28(6): 1051				
	C12	La Bella et al.; "In Vitro and in Vivo Evaluation of ^{99m} Tc(I)-labeled bombesin analogue for imaging of gastrin releasing peptide receptor-positive tumors", Nuclear Medicine and Biology 29(5): 553-560, (2002)						
	C13	Maresca et al.; "Synthesis and Characterization of a Binuclear Rhenium Nitropyrazole Complex [Re ₂ O ₃ Cl ₂ (PPh ₃) ₂ (C ₃ H ₂ V ₃ O ₂) ₂]", Inorganica Chirnica Acta 260: 83-88, (1997)						
	C14	Maresca et al.; "Cationic Complexes of the '3 + 1' Oxorhenium— Thiolate Family", Inorganica Chimica Acta 297 98-105, (2000)						
	Nelson et al.; "Strong-Field Nonconjugated Polyamine Ligand: Low-Spin Iron(II) and High-Spin Nickel(II) Complexes", J. Chem. Soc. (A), pp. 272-276, (1968)							
	Nicholson et al.; "The Synthesis and Characterization of [MCl ₃ (N=NC ₅ H ₄ NH) (HN=NC ₅ H ₄ N)] from [Mo ₄] ⁻ (Where M= Re, Tc) Organodiazenido, Organodiazene-Chelate Complexes. The X-Ray Structure of [ReCl (N=NC ₅ H ₄ NH) (HN=NC ₅ H ₄ N)", Inorganica Chimica Acta 252: 421-426, (1996) Okuno et al.; "Oxidation of cyclohexane with hydrogen peroxide catalysed by copper(II) complexes containing N,N-bis(2-pyridylmethyl)- β -alanineamide ligands", Polyhedron 16(21): 3765-3774, (1997)							
	C18	Reedijk, J.; "Medicinal Applications of He 240, (1999)	avy-Metal Compounds", Current Op	inion Chemical Biology 3: 236-				
	C19	Rose et al.; "Synthesis and Charaterization Molybdenum with the {M(\$\eta 1\$ -HxNNR) (\$\eta 2\$ Organohydrazine-Derivatived Chemotaction of the content of the	!-Hy NNR)} Core and their Relations	hip to Radiolabeled				
	C20	Salmain et al.; "Labeling of Proteins by O Activity of the Conjugates", Bioconjugate	rganometallic Complexes of Rheniu Chem. 4: 425-433, (1993)	m (I). Synthesis and Biological				
	C21	Schibli et al.; "Influence of the Denticity of Tricarbonyl Complexes: A Hint for the Fut 11(3): 345-351, (2002)	f Ligand Systems on the in Vitro and ture Functionalization of Biomolecule	I in Vivo Behavior of ^{99m} Tc(I)- es", Bioconjugate Chemistry				
	C22	Van Staveren et al.; "Spectroscopic Prope Complexes with the [Mo (bpa) (CO) ₃] Unit Peptides", Europ. J. Inorg. Chem., pp. 15	t [bpa = bis (2-picolyl)amine] and the					
	C23	International Search Report for PCT/US0	5/04407 mailed June 29, 2005					
	C24	International Search Report for PCT/US0	5/04448 mailed July 6, 2005					
EXAMINER DATE CONSIDERED								